

In the Claims:

Please amend the claims as follows:

~~Amended Claims~~

What is claimed is:

1. (Amended) ~~Semiconductor~~ A semiconductor laser device comprising:

- a semiconductor laser element ~~(1)~~ with at least one exit surface ~~(5)~~ from which laser light can emerge, which in a first direction (Y) has greater divergence than in ~~the~~ a second direction which is perpendicular to it;

- at least one reflection means ~~(3, 9)~~ which is located spaced apart from the exit surface ~~(5)~~ outside of the semiconductor laser element ~~(1)~~, with a reflecting surface ~~(4, 10)~~ which can reflect back at least parts of the light which has emerged from the semiconductor laser element ~~(1)~~ through the exit surface ~~(5)~~ into the semiconductor laser element ~~(1)~~ such that ~~the~~ a mode spectrum of the semiconductor laser element ~~(1)~~ is influenced thereby;

- and a lens means ~~(2)~~ which is located between the reflection means ~~(3, 9)~~ and the semiconductor laser element ~~(1)~~ and which can at least partially reduce the divergence of the laser light at least in the first direction (Y),

~~characterized in that~~ wherein

- the reflecting surface ~~(4, 10)~~ of the reflection means ~~(3, 9)~~ is concavely curved or spherically curved.

2. (Cancelled)

3. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 1 or 2~~ claim 1, wherein the reflecting surface ~~(4, 10)~~ in the first direction (Y) and in the second direction which is perpendicular to it has a curvature of essentially the same size or curvatures of differing magnitude.

4. (Cancelled)

5. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 1 to 4~~ claim 1, wherein ~~the~~ an optical distance (D) between the reflecting surface ~~(4, 10)~~ and the exit surface ~~(5)~~ of the semiconductor laser element ~~(1)~~ is essentially equal to the focal length (F) of the reflecting surface ~~(4, 10)~~ with respect to at least one of the directions (Y).

6. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~the preamble of~~ claim 1, wherein the exit surface ~~(5)~~ of the semiconductor laser element facing the reflection means ~~(3, 9)~~ has a width of more than 200 microns and the reflecting surface ~~(4, 10)~~ is not curved or is curved only insignificantly.

7. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in claim 6, wherein the exit surface ~~(5)~~ has a width of more than 500 microns, ~~especially~~ or more than 1 mm.

8. (Amended) ~~Semiconductor~~ The semiconductor laser device

as claimed in ~~one of claims 6 or 7~~ claim 6, wherein the reflecting surface ~~(4, 10)~~ or at least one of the reflecting surfaces ~~(4, 10)~~ is made as a wavelength-sensitive element, ~~especially~~ or as a grating.

9. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 1 to 8~~ claim 1, wherein the optical distance (D) and/or the curvature of the reflecting surface ~~(4, 10)~~ are chosen such that the beam waist on the exit surface ~~(5)~~ of at least ~~the~~ component beams ~~(6, 7)~~ of the light which has been reflected back to the semiconductor laser element ~~(1)~~ corresponds essentially to ~~that~~ an aperture which is formed by the exit surface ~~(5)~~.

10. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 2 to 9~~ claim 1, wherein the semiconductor laser element ~~(1)~~ is ~~made as~~ a broad strip emitter or a bar or stack of broad strip emitters.

11. (Cancelled)

12. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 1 to 11~~ claim 1, wherein the exit surface ~~(5)~~ of the semiconductor laser element ~~(1)~~ facing the reflecting surface ~~(4, 10)~~ is coated with an antireflective coating.

13. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 1 to 12~~ claim 1, wherein the semiconductor laser device comprises two reflection means ~~(3, 9)~~ with two reflecting surfaces ~~(4, 10)~~, the two reflecting surfaces ~~(4, 10)~~ each being tilted at oppositely equal angles (α) to the normal ~~(8)~~ on the exit surface ~~(5)~~.

14. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in claim 13, wherein the two reflecting surfaces ~~(4, 10)~~ of the two reflection means ~~(3, 9)~~ have ~~the~~ a same optical distance (D) to the exit surface ~~(5)~~ of the semiconductor laser element ~~(1)~~.

15. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 13 or 14~~ claim 13, wherein at least one of the two reflecting surfaces ~~(4, 10)~~ of the two reflection means ~~(3, 9)~~ is made as a partially reflecting surface so that at least one reflection means ~~(9)~~ which is provided with a partially reflecting surface ~~(10)~~ is used as a decoupler.

16. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 13 or 14~~ claim 13, wherein the two reflecting surfaces ~~(4, 10)~~ of the reflection means ~~(3, 9)~~ are made highly reflecting, the exit surface ~~(13)~~ of the semiconductor laser element (1) facing away from the reflecting surfaces ~~(4, 10)~~ being made partially reflecting and being used as a decoupler in this way.

17. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 1 to 12~~ claim 1, wherein between the semiconductor laser element ~~(1)~~ and the at least one reflection means ~~(3)~~ there is a deflection means which can deflect onto the at least one reflection means ~~(3)~~ the component beams ~~(6, 7)~~ which are emerging at an angle (α) to the normal ~~(8)~~ on the exit surface ~~(5)~~ from the latter.

18. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in claim 17, wherein the deflection means and the at least one reflection means ~~(3)~~ are located on ~~the~~ an axis which is dictated by ~~the~~ a middle perpendicular on the exit surface ~~(5)~~.

19. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 17 or 18~~ claim 17, wherein the deflection means is ~~made~~ as a prism element ~~(15)~~.

20. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in claim 19, wherein the prism element ~~(15)~~ is arranged such that the leg surfaces ~~(17)~~ are facing the exit surface ~~(5)~~ of the semiconductor element.

21. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 18 to~~ claim 20, wherein by the suitable choice of the angle (β) between ~~the~~ a hypotenuse surface ~~(16)~~ and the leg surfaces ~~(17)~~ of the prism element ~~(15)~~ and/or by the

suitable choice of the position of the prism element ~~(15)~~ between the exit surface ~~(5)~~ and the reflecting surface ~~(4)~~ component beams ~~(6, 7)~~ which emerge at an angle ($\pm \alpha$) relative to the normal ~~(8)~~ on the exit surface ~~(5)~~ from the latter can be transferred into one another by the reflecting surface ~~(4)~~ of the at least one reflection means ~~(3)~~.

22. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 17 to 21~~ claim 17, wherein the reflecting surface ~~(4)~~ of the at least one reflection means ~~(3)~~ is made partially reflective so that the at least one reflection means ~~(3)~~ can be used as a decoupler.

23. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 17 to 2~~ claim 17, wherein the reflecting surface ~~(4)~~ of the at least one reflection means ~~(3)~~ is made highly reflecting, the exit surface ~~(13)~~ of the semiconductor laser element ~~(1)~~ facing away from the reflecting surface ~~(4)~~ being made partially reflecting and in this way being able to be used as a decoupler.

24. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 1 to 23~~ claim 1, wherein between the semiconductor laser element ~~(1)~~ and the at least one reflection means ~~(3, 9)~~ there is a wavelength-selective element ~~(12)~~ which is ~~made especially as~~ an etalon.

25. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 1 to 24~~ claim 1, wherein the lens means ~~(2)~~ is made as a cylinder lens with a cylinder axis which extends essentially in the second direction which is perpendicular to the first direction (Y), or is made such that the laser light which has emerged from the exit surface of the passing through the lens means in the first direction (Y) has a divergence roughly the same magnitude as in the second direction which is perpendicular thereto.

26. (Cancelled)

27. (Amended) ~~Semiconductor~~ The semiconductor laser device as claimed in ~~one of claims 1 to 26~~ claim 1, wherein the semiconductor laser element ~~(1)~~ is exposed to a voltage and is supplied with a current for producing electron-hole pairs only in partial areas which correspond to ~~the~~ a three-dimensional extension of the desired mode of the laser light.